

SEQUENCE LISTING

<110> Sukhatme, Vikas P.

<120> METHODS OF PRODUCING ANTI-ANGIOGENIC
PROTEINS

<130> 1440.1031010

<150> US 60/108,536

<151> 1998-11-16

<150> US 60/082,663

<151> 1998-04-22

<150> US 60/067,888

<151> 1997-12-08

<150> PCT/US98/25892

<151> 1998-12-08

<160> 34

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 36

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide

<400> 1

aattccatca ccatcaccat caccatatgg ctagca

36

<210> 2

<211> 36

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide

<400> 2

aatttgctag ccatatgggtg atgggtgatgg tgatgg

36

<210> 3

<211> 555

<212> DNA

<213> Mus musculus

<220>

<221> misc_feature

<222> (1)...(525)

<223> EM1

<221> misc_feature

<222> (1)...(501)

<223> EM2

```

<400> 3
catactcatc aggactttca gccagtgtc cacctggtgg cactgaacac cccctgtct      60
ggagggcatgc gtggtatccg tggagcagat ttccagtgt tccagcaagc ccgagccgtg    120
gggctgtcgg gcaccttccg ggctttcctg tcctctaggc tgcaggatct ctatagcatc    180
gtgcgccgtg ctgaccgggg gtctgtgccc atcgtaacc tgaaggacga ggtgctatct    240
cccagctggg actccctgtt ttctggctcc cagggtaac tgcaaccggg ggcccgcatc    300
ttttcttttg acggcagaga tgcctgaga caccagcct ggccgcagaa gagcgtatgg    360
cacggctcgg accccagtgg gcggaggctg atggagagtt actgtgagac atggcgaact    420
gaaactactg gggctacagg tcaggcctcc tcctgtgtgt caggcaggct cctggaacag    480
aaagctgcga gctgccacaa cagctacatc gtccgtgtgca ttgagaatag cttcatgacc    540
tctttctcca aatag                                     555

```

<210> 4

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide

<400> 4

ggcatatgca tactcatcag gacttt

26

<210> 5

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide

<400> 5

aactcgagct atttgagaa agaggt

26

<210> 6

<211> 28

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide

<400> 6

aagcgccgc ctatttgag aaagaggt

28

<210> 7

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide

<400> 7

ttccatatgc atactcatca ggactttcag cca

33

<210> 8

<211> 35

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide

<400> 8

ttagcggccg cctactcaat gcacaggacg atgta

35

<210> 9

<211> 38

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide

<400> 9

ttagcggccg cctagttgtg gcagctcgca gctttctg

38

<210> 10

<211> 26

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide

<400> 10

gggaattcca tactcatcag gacttt

26

<210> 11

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide

<400> 11

aagaattcca tcatcatcat catcacagca gc

32

<210> 12

<211> 45

<212> DNA

<213> Artificial Sequence

$\langle 220 \rangle$

<223> oligonucleotide

<400> 12

<400> 12
tttgaattcg cccacagcca ccgcgacttc cagccggtgc tccac

45

<210> 13

<211> 45

<212> DNA

<212> DNA
<213> Artificial Sequence

$\langle 220 \rangle$

<223> oligonucleotide

<400> 13

```
<400> 13
aaaagcggcc gcctacttgg aggcagtcac gaagctgttc tcaat
```

45

<210> 14

<211> 24

<212> PRT

<212> PRI
<213> Artificial Sequence

$\langle 220 \rangle$

```
<220>
<223> Leader peptide on protein produced y prokaryotic
      expression system pET17
```

<400> 14

<400> 14
Met Gly His His His His His His His Ser Ser Gly His
1 5 10 15
His Met

1 5
Ile Asp Asp Asp Asp Lys His Met
20

<210> 15

<211> 21

<212> PRT

<212> PRI
<213> Artificial Sequence

<220>

<220>
<223> Leader peptide on protein produced y prokaryotic
expression system pET28A

<400> 15

<400> 15
Met Gly Ser Ser His His His His His His Ser Ser Gly Leu Val Pro
1 5 10 15

1 5
Arg Gly Ser His Met
20

<210> 16

 $\langle 211 \rangle$ 2

<212> PRT

<212> PRT
<213> Artificial Sequence

 $\langle 220 \rangle$

```
<220>
<223> Leader peptide on protein produced y prokaryotic
      expression system pPIC2aA
```

<400> 16

Glu Phe

1

<210> 17

<211> 26

<212> PRT

<213> Artificial Sequence

<220>

<223> Leader peptide on protein produced y prokaryotic
expression system pPICZaA

<400> 17

Glu Phe Met Gly His His His His His His His His His Ser Ser
1 5 10 15Gly His Ile Asp Asp Asp Asp Lys His Met
20 25

<210> 18

<211> 3

<212> PRT

<213> Artificial Sequence

<220>

<223> Leader peptide on protein produced y prokaryotic
expression system pPICZaA

<400> 18

Glu Phe Ala

1

<210> 19

<211> 546

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (289)...(543)

<223> apomigren DNA sequence

<400> 19

atttcaagtg	ccaattatga	gaagcctgct	ctgcatttgg	ctgctctgaa	catgccattt	60
tctggggaca	ttcgagctga	ttttcagtg	ttcaagcagg	ccagagctgc	aggactgttg	120
tccacctacc	gagcattctt	atcttcccat	ttgcaagatc	tgtccaccat	tgtgaggaaa	180
gcagagagat	acagccttcc	catagtgaac	ctcaagggcc	aagtactttt	taataattgg	240
gactcaattt	tttctggcca	cggagggtcag	ttcaatatgc	atattccaat	atactccttt	300
gatggtcgag	acataatgac	agatccttct	tggccccaga	aagtcatttg	gcatgggtcc	360
agcccccatg	gcgtccgcct	tgtggataac	tactgtgaag	catggcgaac	cgcggaacaca	420
gcggtcacgg	gacttgccctc	cccgtcgagc	acggggaaga	ttctggacca	gaaagcatatc	480
agctgtgcta	atcgggcta	tgtcctatgt	atcgaaaaca	gtttcatgac	agacgctagg	540
aagtaa						546

<210> 20

<211> 181

<212> PRT

<213> Homo sapiens

<400> 20
 Ile Ser Ser Ala Asn Tyr Glu Lys Pro Ala Leu His Leu Ala Ala Leu
 1 5 10 15
 Asn Met Pro Phe Ser Gly Asp Ile Arg Ala Asp Phe Gln Cys Phe Lys
 20 25 30
 Gln Ala Arg Ala Ala Gly Leu Leu Ser Thr Tyr Arg Ala Phe Leu Ser
 35 40 45
 Ser His Leu Gln Asp Leu Ser Thr Ile Val Arg Lys Ala Glu Arg Tyr
 50 55 60
 Ser Leu Pro Ile Val Asn Leu Lys Gly Gln Val Leu Phe Asn Asn Trp
 65 70 75 80
 Asp Ser Ile Phe Ser Gly His Gly Gly Gln Phe Asn Met His Ile Pro
 85 90 95
 Ile Tyr Ser Phe Asp Gly Arg Asp Ile Met Thr Asp Pro Ser Trp Pro
 100 105 110
 Gln Lys Val Ile Trp His Gly Ser Ser Pro His Gly Val Arg Leu Val
 115 120 125
 Asp Asn Tyr Cys Glu Ala Trp Arg Thr Ala Asp Thr Ala Val Thr Gly
 130 135 140
 Leu Ala Ser Pro Leu Ser Thr Gly Lys Ile Leu Asp Gln Lys Ala Tyr
 145 150 155 160
 Ser Cys Ala Asn Arg Leu Ile Val Leu Cys Ile Glu Asn Ser Phe Met
 165 170 175
 Thr Asp Ala Arg Lys
 180

<210> 21
 <211> 51
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Oligonucleotide

<400> 21
 ttttttgaat tcatttcaag tgccaattat gagaagcctg ctctgcattt g

51

<210> 22
 <211> 50
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Oligonucleotide

<400> 22
 aagaatgcgg ccgcttactt cctagcgtct gtcataaaac tgttttcgat

50

<210> 23
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Oligonucleotide

<400> 23
aattccatca ccataccat cacg

24

<210> 24
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide

<400> 24
aattcgtgat ggtgatggtg atgg

24

<210> 25
<211> 42
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide

<400> 25
ttccatatga tatactcctt tgatggtcga gacataatga ca

42

<210> 26
<211> 47
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide

<400> 26
aatgcggccg cttacttcct agcgtctgtc atgaaactgt tttcgat

47

<210> 27
<211> 2
<212> PRT
<213> Artificial Sequence

<220>
<223> Leader peptide on protein produced by eukaryotic
yeast expression system pPICZaA

<400> 27
Glu Phe
1
<210> 28
<211> 8
<212> PRT
<213> Artificial Sequence

<220>

<223> Leader peptide on protein produced by eukaryotic
yeast expression system pPICZaA

<400> 28
Glu Phe His His His His His His
1 5

<210> 29
<211> 21
<212> PRT
<213> Artificial Sequence

<220>
<223> Leader peptide on protein produced by prokaryotic
expression system pET

<400> 29
Met Gly Ser Ser His His His His His Ser Ser Gly Leu Val Pro
1 5 10 15
Arg Gly Ser His Met
20

<210> 30
<211> 23
<212> PRT
<213> Artificial Sequence

<220>
<223> Leader peptide on protein produced by prokaryotic
expression system pET

<400> 30
Glu Phe Met Gly Ser Ser His His His His His Ser Ser Gly Leu
1 5 10 15
Val Pro Arg Gly Ser His Met
20

<210> 31
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide

<400> 31
aagaattcgt gttgtatctg tcagaatgt

29

<210> 32
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide

<400> 32
agcggccgcc taccctcctg tctctga

27

<210> 33
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide

<400> 33
aagaattcgt gtatctctca gagtgc

26

<210> 34
<211> 27
<212> DNA
<213> Artificial Sequence

<220>
<223> Oligonucleotide

<400> 34
agcggccgcc tattctgttc ctgagta

27